WEST GRASSY MOUNTAIN

ALLOTYENT

04042

MONITORING DATA



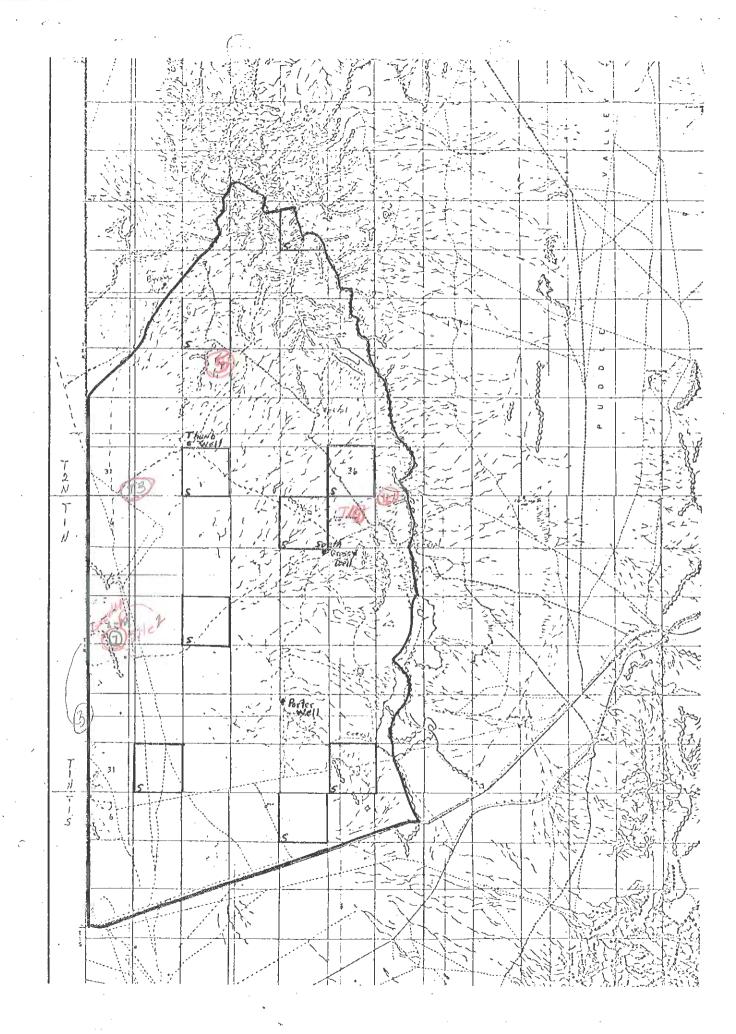
RANGELAND

HEALTH

ASSESSMENTS

FOR

WEST GRASSY MOUNTAIN ALLOTMENT



FUNDAMENTALS OF RANGELAND HEALTH Standards and Guidelines Assessment West Grassy Allotment

Utah Standards for Rangeland Health were assessed by and an interdisciplinary team on 8/27/2002 on the West Grassy (#04042) allotment. The interdisciplinary team (consisting of Rangeland Management Specialists, Wildlife Biologists, and Natural Resource Specialists) utilized the Tooele County Soil Survey (USDA-NRCS 2000), Range Site Descriptions (USDA-SCS 1994), and Interpreting Indicators of Rangeland Health (USDI-BLM et al. 2000). Specific Upland sites were selected based on land ownership, representative range sites, livestock use patterns, and the permittees (figure 1).

PART 1. CONFORMANCE REVIEW

STANDARD#1

<u>Upland soils exhibit permeability and infiltration rates that sustain or improve site productivity, considering the soil type, climate, and landform.</u>

Site Number	Soil Stability	Hydrologic Function
Trend Site #1&2	Stable	Functioning
Trend Site #3&4	Stable	Functioning
Trend Site #5&6	Stable	Functioning
Trend Site #7&8	Stable	Functioning
Site #2	Stable	Functioning
Site #3	Stable	Functioning

RESOURCE CONDITIONS WITHIN THE ALLOTMENT MEET THE STANDARD? Yes

Rationale:

The Ecological Sites in this allotment included Desert loam (Shadscale) (#122), Desert gravelly loam (Shadscale) (#120), Desert Flat (Shadscale) (#126), Alkali Flat (Greasewood) (#004), Semi-desert stony loam (Black sagebrush) (#252), Semi-desert sandy loam (Wyoming big sagebrush) (#226). There were no signs of gullies, wind scours, or blowouts. Bare ground was considered adequate for site potential and litter was found to be in place. No sign of compaction was observed. Flow patterns matched that expected for the sites studied. There were no active pedestals or deposition areas. The vegetation on the site is adequate to protect the site from erosion. These factors indicate that the existing soil resource is

stable and functioning hydrologically.

STANDARD#2

Riparian and wetland areas are in properly functioning condition. Stream channel morphology and functions are appropriate to soil type, climate and landform.

Stream/Spring	PFC Rating
No Riparian Areas on allotment	N/A

RESOURCE CONDITIONS WITHIN THE ALLOTMENT MEET THE STANDARD? N/A

Rationale:

There are no riparian areas on the West Grassy Allotment. Standard #2

does not apply.

STANDARD#3

Desired species, including native, threatened, endangered, and specialstatus species, are maintained at a level appropriate for the site and species involved.

Site Number	Species Diversity
Trend Site #1&2	At Risk
Trend Site #3&4	Intact
Trend Site #5&6	Intact
Trend Site #7&8	Intact
Site #2	Intact
Site #3	Not Intact

RESOURCE CONDITIONS WITHIN THE ALLOTMENT MEET THE STANDARD? Yes

Rationale:

The allotment nearly matches the Range site descriptions, biotic diversity is for the most part "Intact." All native plant species are present and in abundance on all sites studied and the condition of the allotment was considered to be improving. The Rangeland health assessment team determined that Trend Site #1&2 is "At Risk" due to the exotic nonnative forb Halogeton (*Halogeton glomeratus*). Halogeton is currently a minor component of this site, but could become dominant if some disturbance were to happen. The Biotic Diversity for

Site #3 was determined to be "Not intact." The Site is an Alkali Flat (Greasewood); major components of this ecological site are missing. The concluded that it was along the Hastings Cutoff and could have been due to historic grazing practices.

STANDARD#4

BLM will apply and comply with water quality standards established by the State of Utah (R.317-2) and the Federal Clean Water and Safe Drinking Water Acts. Activities on BLM lands will fully support the designated beneficial uses described in the Utah Water Quality Standards (R.317-2) for surface and groundwater.

RESOURCE CONDITIONS WITHIN THE ALLOTMENT MEET THE STANDARD? Yes

Rationale:

The allotment is not located near a water body, water source, or wetland.

PART 2. ARE LIVESTOCK A CONTRIBUTING FACTOR TO NOT MEETING THE STANDARDS?

Standard #1

No. The West Grassy allotment is currently meeting the standard for Soil Stability and Hydrologic Function.

Standard #2

No. This standard does not apply to the West Grassy allotment.

Standard #3

No. The West Grassy allotment is currently meeting the standard for Biotic Diversity.

The Rangeland Health Assessment team found that Trend Site #1&2 was "At Risk" to invasive nonnative annual forbs. The Biotic Integrity of this site was determined to be "At Risk" because of Halogeton is common throughout the site. Halogeton is currently a minor component, although some disturbance or chain of disturbances on this site may allow Halogeton to dominate this site. It was determined that the current livestock use on this site is not contributing to the Halogeton problem.

The assessment team determined that Site #3 is "Not Intact" due to large Halogeton flats which resulted from some historical disturbance. The team could not identify the cause of the disturbance. This site is located along the Hastings Cutoff trail, an important migration route for early settlers to the west. Perennial grasses are almost completely absent and the shrub component is significantly reduced. It was determined that the current livestock management is

not contributing to the Biotic diversity situation.

Standard #4

No. This standard does not apply to the West Grassy allotment.

PART 3. GUIDELINES FOR GRAZING MANAGEMENT TO IMPLEMENT

The West Grassy Allotment is currently meeting the standards in all Rangeland Health assessments except the Biotic Diversity standard on Site #3. Site #3 was determined to be "Not Intact" due to historic disturbance and the over abundance of Halogeton (Halogeton glomeratus). It was determined that the "Not Intact" condition of Site #3 was not due to current livestock grazing management. Therefore, Guidelines for Grazing Management to Implement are not required at this time.

Glenn A. Carpenter

Salt Lake Field Office Manager

REFERENCES

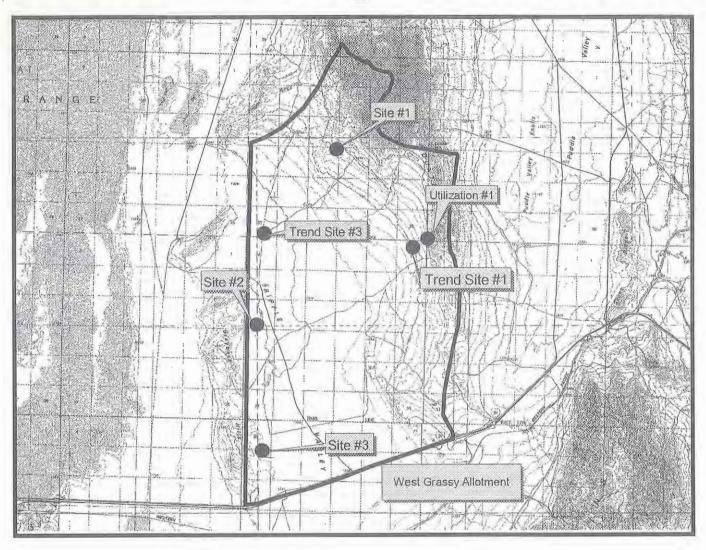
USDA-NRCS. 1997. Soil Survey of Tooele Area, Utah. US Government Printing Office:

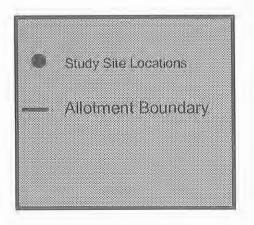
USDA-SCS. 1994. Range Site Descriptions (059). Section II-E. Soil Conservation Service.

USDI-BLM. 2000. <u>Rangeland Health Assessment Worksheets</u>. Salt Lake Field Office. Unpublished field data.

Utah-DEQ. 2000. <u>Utah's 303(d) List of Impaired Waters</u>. Utah Department of Environmental Quality. Salt Lake City, Utah.

West Grassy Allotment





Bureau of Land Management Salt Lake Field Office 2370 South 2300 West Salt Lake City, UT 84119



This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause misalignment of data layers.

Figure 1. West Grassy Allotment Rangeland Health Assessment Site Locations.

.Site #2

Rangeland Health Evaluation Summary Worksheet

Part 1. Area of Interest Documen	ntation (Bold iten	ns require completion, other information is optional)
State Ut Office	ut-020	Management Unit West Grassy
Pasture/Wotershed	1D# WG-2	Major Land Resource Area
		0.001.11
Legal T ,R ,Sec ,	1/4, 1/4	N: 45 19764 or Lat, Long or UTM Coord £: 319777
		Photo(s) Taken Yes X No
Observer(s) Gates, Heaton,	Torres	Date 8/27/02
Ecological Site Desertgravely	(Shodscale	Soil Map Unit Name Skum tah 81+ Lasm
Rangeland Ecological Site Description on		Area of Interest Determination
Surface Texture		Surface Texture
Depth: Very Shallow Shallow Model (<10") (10"-20") (20"-4")		Depth: Very Shallow Shallow Moderate Deep (<10") (10"-20") (20"-40") (>40")
List diagnostic horizons in profile and dep	,	List diagnostic horizons in profile and depth
13		13
24		24
Parent MaterialSlope	% Elevotian 434	B ft Topographic Position Aspect _NW
Avg Annual Precip Recent	Weather (last 2	years) Drought X Normal Wet
		nces sheep allotment, lots of trailing
1	of interest Big	game guzzler adjacent to site.

Species Dominance Worksheet

Part 1 (Required)	
The most common species, noxious wee	ds (state-listed plants), invasive natives, invasive exotics
(non-noxious) are ranked according to	dominance using cover or weight .
Dominant Species on Site	Noxious Weeds
1 Atco	
2 KoAm	2
3	3
4	
Invasive Natives	Invasive Exotics
1	1 Halogeton
2	2 Pyth
3	3
Part 2 (Optional) Dominant Species In The most common species are ranked at Annual Grasses 1 Brill 2 3 Perennial Grasses 1 Offy 2 Subjective Properties of the properties of	Annual Forbs 1 Halogeton lepidium perifoliatum 2 Burrbutter Cup
2 Pore	3
Shrubs and Trees 1 ATCO AHY 2 KOAM (2005) 3 AYSP	Succulents 1 2
Biological Crust (rate by component no 1 Rack Crust	
^	

Functional/Structural Groups Worksheet

State _	UT	Office .	020	Ecological Site	Site ID
					8/27/02

Functional/Structur	ral Groups	Species List for Functional/Structural Groups	
Name	Potential !	Actual ²	Plant Names
Annual Forb	7	2	
Perenial for b	510	1	
Perenial Grass	40	15	
Annual Grass	0	2	
5hrubs	50	80	
,			
			·
Biological Crust ³			100 100 100 100 100 100 100 100 100 100

Indicate whether each "structural/functional group" is a Dominant (D) (roughly 41-100% composition), a Subdominant (S) (roughly 11-40% composition), a Minor Component (M) (roughly 3-10% composition), or a Trace Component (T) (<3 % composition) based on weight or cover composition in the area of interest (e.g., "Actual²" column) relative to the "Potential¹" column derived from information found in the ecological site description and/or at the ecological reference area.

Biological Crust³ dominance is evaluated solely on cover not composition by weight.

Cover Worksheet

State UT	Office	Ecological Site	
Observer(s) Gates,	Heaton, Torres	Date 8/27/02 Site ID	

	COVER CLASSES (% Canopy)									
LIFE FORMS	0	-01	2-5	6-15	16-30	31-50	51-75	76-100		
.l. • Grass										
Annual			2							
Native Perennial				8						
Exotic Perennial	0			THE PARTY						
all-storia										
Annual								10.00		
Perennial		30-71-498	2	t- t-						
III Shrub				ना हर हुट	28					
IV-Tree	0			The state of the s						
V Succulent	0			1. 2. 2. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.		077.6				
VI - Biological Crust										
% GROUND COVER ²	0	0.1	2-5	6-15	16-30	31-50	51-75	76-100		
1 - Vascular Plants		to the state of				41				
II - Standing Dead Vegetation				10:						
III - Litter (in contact with the soil surface)				8		10.50g				
IV - Biological Crust					25	1800 1800 1800 1800 1800 1800 1800 1800	1.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0			
V - Rock/Gravel				12	0					
VI - Bare Ground				1			### ### ###			

¹ Life Forms Cover - Record multiple canopy cover classes; total plant canopy may exceed 100%. Small openings (less than 2" in diameter) are included as cover.

Notes: Include source of cover data (e.g., estimates or measurements)

² Ground Cover - Category I is an estimate of total vascular plant cover; overlapping canopies are counted as only one canopy (record life form with first point of contact). Total vascular plant cover (I) together with the sum of cover in Categories II-VI should total to approximately 100%.

Part 2. Indicator Rating

		Departure from Ecological Site Description/ Ecological Reference Area(s)						
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	Nemore Blight		
S,H	1. Rills							
Comment	rs:					The state of the state of the		
S,H	2. Water Flow Patterns				X			
Comment	is:			The subsection and subsections	- F-D	A STATE OF THE PARTY OF THE PAR		
S,H	3. Pedestals and/or Terracettes				X			
	is: in the water flow patterns	SZWIEGO ZWIEGO WIEGO WIE	3	Tutous en en particulario				
S,H	4. Bare Ground				X			
	is: Slightly more due to loss a	Fgrass	5	Parameter information of the Confession of the		A contract of the contract of		
S,H	5. Gullies							
Comment	ts:		,-			- Francisco Constitution of the Constitution o		
S	6. Wind-Scoured, Blowouts, and/or Deposition Areas							
Comment	rs:							
Н	7. Litter Movement	* **			X	47		
Comment	is: moving mostly in waterflow part	erns						
S,H,B	8. Soil Surface Resistance to Erosion							
	ts: Good resistance due to veg, c	rust Al	ots of	ock.				
S,H,B	9. Soil Surface Loss or Degradation							
Commen	ts:	(No. and Committee of the Committee of t		Taxanan and the says				
Н	10. Plant Community Composition and Distribution Relative to Infiltration and Runoff							
Commen	ts:	and the second second		The state of the s				
S,H,B	11. Compaction Layer		N. C.		X			
Commen	15: Slight compaction in trails					No control of the con		
В	12. Functional/Structural Groups				X			
Commen	ts: Grasses & than expected W/S	hrubs T	Man	expect.	ed,			
В	13. Plant Mortality/Decadence				X			
Commen	15: Some W/shadscale being deca	dent						
Н,В	14. Litter Amount							
Commen	ts:							
В	15. Annual Production							
Commen	ts: 250 unfavorable			A CONTRACTOR OF THE PARTY OF TH				
В	16. Invasive Plants				X			
Commen	ts: mainly just on disturbed sites				-			
В	17. Reproductive Capability of Perennial Plants							
Commen				, emission minimalities		THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IN COLUMN TO THE PERSON NAMED IN		

Part 3. Summary A. Indicator Summary

Departure from Ecological Site Description/ Ecological Reference Area(s)

	Rangeland Health Attributes	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	Hadirət Bliga	Σ
S	Soil/Site Stability (Indicators 1-6, 8, 9 & 11)				4		9
Н	Hydrologic Function (Indicators 1-5, 7-11 & 14)				5		11
В	Biotic Integrity (Indicators 8-9 & 11-17)				4	15	9

B. Attribute Summary - Check the category that best fits the "preponderance of evidence" for each of the three attributes relative to the distribution of indicator ratings in the preceding Indicator Summary table.

Attribute		oderate Extreme Moderate	Slight to Moderate	iuku i Birit
Soil/Site Stability Rationale:			X	17.0
Hydrologic Function Rationale:				
Biotic Integrity Rationale:	TSG ALCOHOL			X

Attribute Rating- Check one in each row

Soil/Site Stability	Not Stable	At Risk——	Stable
Biotic Integrity	Not lutact —— □	At Risk ——	Intact — Di
Watershed Function	Non-Functioning-	At Risk ——	Functioning—

Comments on Indicator(s) on other side of this page

Appendix 6

Soils stable, but there is a lot of sheep trailing Page 2 through site. Also there is a lot of antelope Page 2 in the immediate area. Biotic is intact plant diversity is a degnate, Grass composition is lower than expected & shrubs are more abundant than expected. Invasives are only a minor component of the plant community.

Rangeland Health Evaluation Summary Worksheet

Part 1. Area of Interest Documentation (Bold	
State UT-020	Management Unit West appsy
Pasture/Watershed ID#	
Location (description)	Auctor
Legal T ,R ,Sec , 1/4, 1/	N:45 15 723 4 or Lat, long or UTM Coord =: 319238
Size of Evaluation Area	Photo(s) Taken Yes No
Observer(s) Heaton Gates Tomes	*Date 08/27/02
	Soil Map Unit Name #27 Iranatch
Rangeland Ecological Site Description and/or Soil Survey	y Area of Interest Determination
Surface Texture	Surface Texture
List diagnastic horizons in profile and depth	List diagnostic horizons in profile and depth
13	1 3 2 4
Parent Material Slope % Elevation %	4280 ft Topographic Position Aspect N/A
Avg Annual Precip Recent Weather (last	2 years) Draught Normal Wet
	rbances Sheep allotment, no sign of
Describe offsite influences on area of interest _	
536 531 =	- Section marker We GPS'd it because it is broken
14	

Species Dominance Worksheet

The most common species, noxious weeds (state-listed plants), invasive natives, invasive exotics

Part 1 (Required)

Dominant Species on Site	Noxious Weeds
1 Halogeton	1 None
2 SAVE	2
3	3
4	
Invasive Natives	Invasive Exotics
1 None	1 thogeton
2	
3	3 lepidium
The most common species are ranked	occording ta dominance using cover \square or weight \square by life form.
Annual Grasses 1 BRTE 2	2 Capidium perfoliatum
1 BRTE 2 3 Perennial Grasses	1 Halogeton Tansy mustare 2 Cepidium perfoliatum 3 Salsola iberica Perennial Forbs
1 BRTE 2 3 Perennial Grasses 1 SIHY	1 Halogeton Tansy mustare 2 Cepidium perfoliatum 3 Salsola iberica Perennial Forbs
1 <u>BRTE</u> 2	1 Halogeton Tansy mustare 2 Lepidium perfoliatum 3 Salsola iberica Perennial Forbs 1 2
1 BRTE 2 3 Perennial Grasses 1 SIHY 2	1 Halogeton Tansy mustare 2 Lepidium perfoliatum 3 Salsola iberica Perennial Forbs 1 2
Perennial Grasses 1 SIHY 2 3 Shrubs and Trees	1 Halogeton Tansy mustare 2 Cepidium perfoliatum 3 Salsola iberica Perennial Forbs 1 2 3
Perennial Grasses 1 SIHY 2 3 Shrubs and Trees	1 Halogeton Tansy mustaro 2 Lepidium perfoliatum 3 Salsola iberica Perennial Forbs 1 2 3 Succulents 1
Perennial Grasses 1 SIHY 2 3 Shrubs and Trees 1 SAVE	1 Halogeton Tansy mustare 2 Lepidium perfoliatum 3 Salsola iberica Perennial Forbs 1 2 3 Succulents 1 2

Functional/Structural Groups Worksheet

				_ Ecological Si		Site ID	
Obser	ver(s)	ates, H	eaton, T	orres	Date_	8/27/02	

Functional/Str	ructural Groups	Species List for Functional/Structural Group		
Name	Potential	Actual ²	Plant Names	
A. Forh	7	40		
P. Forb	310	0		
Shrub	70	55		
A. Grass	0	5		
A. Forb P. Forb Shrub A. Grass P. Grass	20	T		
		\		
			7	
And the Miles	1			
Biological Crust ³	,			

Indicate whether each "structural/functional group" is a Dominant (D) (roughly 41-100% composition), a Subdominant (S) (roughly 11-40% composition), a Minor Component (M) (roughly 3-10% composition), or a Trace Component (T) (<3 % composition) bosed on weight or cover composition in the area of interest (e.g., "Actual²" column) relative to the "Potential¹" column derived from informatian found in the ecological site description and/or at the ecological reference area.

Biological Crust³ dominance is evaluated solely on cover not composition by weight.

Cover Worksheet

State	UT	Office _	020		_ Ecological Site		
Observe	(s) Gates	Heaton,	Torres	Date.	8/27/02	Site ID	

				CO	VER CLASSE	\$ 1% Can	ору)		
	LIFE FORMS	0	0-1	2-5	6-15	16-30	31-50	51-75	_76-100
BURNE	I - Grass								
	Annual			5	7				
Ī	Notive Perennial								
	Exotic Perennial	0			11 .78 851		10 10 10 10 10 10 10 10 10 10 10 10 10 1		
	II a Rond								
100	Annual			and the second second	-10/2		41	and the same of th	
	Perenniol	0					2015 A 2016		
SECTION.	M⇒Shrub ra				्री में विश्	18			
110000000000000000000000000000000000000	IV - Tree	0							
The second second	V - Succulent	0					15-15-16-16		
	Alagological (ama								
	% GROUND COVER ²	0	0-1	2-5	6-15	16-30	31-50	51-75	76-10
	I - Vascular Plants				-7"			64	
	II - Standing Dead Vegetation			4			1.1		
	III - Litter (in contact with the soil surface)				18				
-	IV - Biological Crust			4	7.1.				
	V - Rock/Gravel) intata		
ř.	VI - Bare Ground					20	1 6042		

¹ Life Forms Cover - Record multiple canopy cover classes; total plant canopy may exceed 100%. Small openings (less than 2" in diameter) are included as cover.

Notes: Include source of cover data (e.g., estimates ar measurements)

² Ground Cover - Category I is an estimate of total vascular plant cover; overlapping canopies are counted as only one canapy (record life form with first point of contact). Total vascular plant cover (I) together with the sum of cover in Categories II-VI should total to approximately 100%.

Part 2. Indicator Rating

		Departure from Ecological Site Description/ Ecological Reference Area(s)						
Attribute	Indicators	- 3 30came	Moderate to Extreme	Moderate	Slight to Moderate	1) (b) (b) (b) (c)		
S,H	1. Rills							
Comment	s:			Enterior Control of the Service		License and and and		
S,H	2. Water Flow Patterns							
Comment	15:	The state of the s		and the second second		Sand Control of the C		
S,H	3. Pedestals and/or Terrocettes							
Comment	is:					La secondary a United		
S,H	4. Bare Graund					建筑		
Comment	is: as expected but wer all annu	al linus	sive for	55				
S,H	5. Gullies					4.44		
Comment	s: natural dvainages					A SOUTH OF THE SECOND		
S	6. Wind-Scoured, Blowouts, and/or Deposition Areas							
Comment	is. Lots of anthills!							
Н	7. Litter Movement							
Comment	ts:			******	1			
S,H,B	8. Soil Surface Resistance to Erasion							
Commen	is: lots of organic matter protecti	ng soil	5					
S,H,B	9. Soil Surface Loss or Degradation				X			
Commen	is: Some loss of topsoil							
Н	10. Plant Community Composition and Distribution Relative to Infiltration and Runoff							
Commen	rs:	The second second second						
S,H,B	11. Compaction Layer							
Commen	ts:		-			Remodel Manager		
В	12. Functional/Structural Groups		X			1		
Commen	ts: Almost completely missing P. grass (8	144) repl.	aced by	haloge	ton			
В	13. Plant Mortality/Decadence				X			
Commen	ts: Slight SAVE die off, but what	is here i	sloking	alrigh	+			
Н,В	14. Litter Amount				X			
Commen	ts: Slightly more than expected d.	ne to av	mual for	-65				
В	15. Annual Production							
Commen	ts: 250 Unfavorable							
В	16. Invasive Plants					2 (P) 57		
Commen	15: Halogeton is dominant spp.					1		
	17. Reproductive Capability of Perennial Plants							

Part 3. Summary

A. Indicator Summary

Departure from Ecological Site Description/ Ecological Reference Area(s)

	Rangeland Health Attributes	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	Nonele Bligar	Σ
5	Soil/Site Stability (Indicators 1-6, 8, 9 &11)				1		9
Н	Hydrologic Function (Indicators 1-5, 7-11 & 14)				2		11
В	Biotic Integrity (Indicators 8-9 & 11-17)				3		9

B. Attribute Summary - Check the category that best fits the "preponderance of evidence" for each of the three attributes relative to the distribution of indicator ratings in the preceding Indicator Summary table.

Attribute	Moderate Slight to Island Moderate Slight
Soil/Site Stability Rationale:	
Hydrologic Function Rationale:	
Biotic Integrity Rationale:	

Attribute Rating- Check one in each row

Soil/Site Stability	Not Stable	At Risk——□	Stable-
Biotic Integrity	Not Intact — E	At Risk ——	Intact —
Watershed Function	Non-Functioning-	At Risk	Functioning——

Comments on Indicator(s) on other side of this page

Appendix 6

Soils are stable because 40+5 on a flat of veg. cover is good, so the soils aren't going anywhere. Page 2
Biotic is not intact because of Halogeton. Some
Historical disturbance has occurred. Note: We are at the Hastings cutoff. P. grasses almost completely missing and shrubs are significantly reduced.

Trend 1/2

Rangeland Health Evaluation Summary Worksheet

Part 1. Area of Interest Documentation (Bold ite	ms require completion, other information is optional)
State UT Office Ut- 020	Management Unit Wist GONSY
Pasture/Watershed ID#	Mojor Land Resource Area
Location (description)	1.11844653
Legal T $\perp N$, R $\perp 1 \vee M$, Sec $\perp 1 \wedge M$, $\leq 1/4 \wedge M$, $\leq 1/4 \wedge M$, $\leq 1/4 \wedge M$	or Lat, Long or UTM Caord = 1076494
Size of Evaluation Area	Photo(s) Taken Yes No
Observer(s) Gates, Heaton, Torres	Date 8/23/02
Observer(s) Gates, Heaton, Torres Ecological Site Deart Lam (Shadscale) Soil/Site Ve	Soil Map Unit Name Toocle Fire Sand
Rongelond Ecological Site Description and/or Soil Survey Surface Texture Depth: Very Shallow Shallow Moderate Deep (<10") (10"-20") (20"-40") (>40") List diagnostic horizons in profile and depth 1 3 Parent Material Slope % Elevotion/ Avg Annual Precip Recent Weather (last 2) Describe wildlife and livestock use and recent disturbed	Surface Texture
Could also be His Cliff down anually Sandy Low	
#12 Cliffdown growelly Sondy Low	decile)

Species Dominance Worksheet

Part 1 (Required)

The most common species, noxious weeds	(state-listed plants), invasive natives, invasive exotics
(non-noxious) are ranked occording to do	minance using cover or weight .
Dominant Species on Site	Noxious Weeds
1 ATCO	1 None
2 RRLA	2
3 Halogeton	3
4	
Invasive Natives	Invasive Exotics
1 Nove	1 Halogeton 2 Salsala iberica
2	2 Salsola Iberica
3	3 Burr butteraup. Cheatgrass
Annual Grasses 1 BPTE 2	2 Burr Buttercup
Perennial Grasses	Perennial Forbs
1 ORHY Nevada Bluegrass	1 Spheraloa coxinion
2 5147	
3 <u>POSE</u>	3
Shrubs and Trees	Succellents
1 GUSA ARSP EPNE	1 OPPO
2 KRLA CHNA	2
3 ATCO ARNO	3
Biological Crust (rate by component not s) 1 Black Crust 2	
•	

Functional/Structural Groups Worksheet

State_	MT	Office _	020	Ecological Site		Site ID	Tal
Observ	ver(s)_	Heaton, G	ates,	Torres	Date_	8/23/02	

Functional/St	ructural Groups	1	Species List for Functional/Structural Groups
Name	Potential!	Aciual ²	Plant Names
4. Forb		12	
. Forb	/15	T	
Shrub	40	58	
A. Forb Shrub A. Grass P. Grass	0	5	
P. Grass	45	25	
			No. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Biological Crust ³			A SIGNAL OF THE

Indicate whether each "structural/functional group" is a Dominant (D) (roughly 41-100% composition), a Subdominant (S) (roughly 11-40% composition), a Minor Component (M) (roughly 3-10% composition), or a Trace Component (T) (<3 % composition) based on weight or cover composition in the area of interest (e.g., "Actual²" column) relative to the "Potential¹" column derived from information found in the ecological site description and/or at the ecological reference area.

Biological Crust³ dominance is evaluated solely on cover not composition by weight.

Cover Worksheet

State	MT	Office_	020	Ecological Site		
				8/23/02	T-1	

			CO	VER CLASSI	ES (% Can	ору)		
LIFE FORMS ¹	0	0-1	2-5	6-15	16-30	31-50	51-75	76-100
- Gross								
Annual			2					
Native Perennial				15				
Exotic Perennial	0			19 TH 19				
II - Forb								
Annual				10				
Perennial				N 10 10 10 10 10 10 10 10 10 10 10 10 10				
IIIShrub ar					20			
We'free								
V - Succulent				1				
VI - Biological Grust								
% GROUND COVER ²	0	0.1	2-5	6-15	16-30	31-50	51-75	76-10
- Vascular Plants						47		
II - Standing Dead Vegetation			4	-100				
III - Litter (in contact with the soil surface)				6				
IV - Biological Crust				11 34.6	20			
V - Rock/Gravel				8				
VI - Bare Ground				15				

¹ Life Forms Cover - Record multiple canopy cover classes; total plant canopy may exceed 100%. Small openings (less than 2" in diameter) are included as cover.

Notes: Include source of cover data (e.g., estimates or measurements)

² Ground Cover - Category I is an estimate of total vascular plant cover; overlapping canopies are counted as only one canopy (record life form with first point of contact). Total voscular plant cover (I) together with the sum of cover in Categories II-VI should total to approximately 100%.

Part 2. Indicator Rating

Indicators It all somments: H 1. Rills Definition			Dep	arture from Ecologic	Ecological Si al Reference	ite Descript Area(s)	rion/
mments: H	Attribute	Indicators	Extreme		Moderate	Slight to Moderate	Netro ite Slielt
omments: H 2. Water Flow Potterns Domments: H 3. Pedestals and/or Terracettes Domments: 3	S,H	1. Rills					
mments: H 3. Pedestals and/or Terracettes mments: 3	Comment	s:	In the comment of the		SHIP TO THE PROPERTY OF THE PR		Total Property
omments: H 3. Pedestals and/or Terracettes briments: 3	S,H	2. Water Flow Potterns				X	
mments: Just win water flow patterns H	Comment	s:	TENS ACCOUNTS TO THE OWNER, OF		United States Control (1)		This spread aperta Zelan year to
mments: Just win water flow patterns H	S,H	3. Pedestals and/or Terracettes				X	
H 4. Bare Ground comments: H 5. Gullies comments: 6. Wind-Scoured, Blowauts, and/or Deposition Areas comments: 7. Litter Movement comments: H,B 8. Soil Surface Resistance to Erosian comments: H,B 9. Soil Surface Loss or Degradation comments: 10. Plant Community Composition and Distribution Relative to Infiltration and Runoff comments: H,B 11. Compaction Layer comments: 12. Functional/Structural Groups comments: 13. Plant Mortality/Decadence comments: 14. Litter Amount comments: 15. Annual Praduction comments: 16. Invasive Plants			1 - 1/2		TANK AND THE PROPERTY OF THE PARTY OF THE PA		
H 5. Gullies omments: 6. Wind-Scoured, Blowouts, and/or Deposition Areas omments: 7. Litter Movement omments: H,B 8. Soil Surface Resistance to Erosion omments: H,B 9. Soil Surface Loss or Degradation omments: 10. Plant Community Composition and Distribution Relative to Infiltration and Runoff omments: H,B 11. Compaction Layer omments: 12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: B 14. Litter Amount omments: 15. Annual Praduction amments: 16. Invasive Plants	S,H						
omments: 6. Wind-Scoured, Blowouts, and/or Deposition Areas	Comment	s:					- Contraction - Contraction
6. Wind-Scoured, Blowouts, and/or Deposition Areas comments: 7. Litter Movement comments: H,B 8. Soil Surface Resistance to Erosion comments: H,B 9. Soil Surface Loss or Degradation comments: 10. Plant Community Composition and Distribution Relative to Infiltration and Runoff comments: H,B 11. Compaction Layer comments: 12. Functional/Structural Groups comments: 13. Plant Mortality/Decadence comments: B 14. Litter Amount comments: 15. Annual Praduction comments: 16. Invasive Plants	S,H	5. Gullies					
omments: H,B 8. Soil Surface Resistance to Erosion omments: H,B 9. Soil Surface Loss or Degradation omments: 10. Plant Community Composition and Distribution Relative to Infiltration and Runoff omments: H,B 11. Compaction Layer omments: 12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: B 14. Litter Amount omments: 15. Annual Production amments: 16. Invasive Plants	Comment	s:		-*			
7. Litter Movement omments: H,B 8. Soil Surface Resistance to Erosion omments: H,B 9. Soil Surface Loss or Degradation omments: 10. Plant Community Composition and Distribution Relative to Infiltration and Runoff omments: H,B 11. Compaction Layer omments: 12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: 14. Litter Amount omments: 15. Annual Production amments: 16. Invasive Plants	S	6. Wind-Scoured, Blowouts, and/or Deposition Areas					Company of the second
omments: H,B 8. Soil Surface Resistance to Erosian omments: H,B 9. Soil Surface Loss or Degradation omments: 10. Plant Community Composition and Distribution Relative to Infiltration and Runoff omments: H,B 11. Compaction Layer omments: 12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: ,B 14. Litter Amount omments: 15. Annual Production amments: 16. Invasive Plants	Comment	s: .					
H,B 8. Soil Surface Resistance to Erosian omments: H,B 9. Soil Surface Loss or Degradation omments: 10. Plant Community Composition and Distribution Relative to Infiltration and Runoff omments: H,B 11. Compaction Layer omments: 12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: B 14. Litter Amount omments: 15. Annual Praduction amments: 16. Invasive Plants	Н	7. litter Movement	1 0				
omments: H,B 9. Soil Surface Loss or Degradation omments: 10. Plant Community Composition and Distribution Relative to Infiltration and Runoff omments: H,B 11. Compaction Layer omments: 12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: B 14. Litter Amount omments: 15. Annual Production amments: 16. Invasive Plants	Comment	s:					
H,B 9. Soil Surface Loss or Degradation comments: 10. Plant Community Composition and Distribution Relative to Infiltration and Runoff comments: H,B 11. Compaction Layer comments: 12. Functional/Structural Groups comments: 13. Plant Mortality/Decadence comments: B 14. Litter Amount comments: 15. Annual Praduction comments: 16. Invasive Plants	S,H,B	8. Soil Surfoce Resistance to Erosian					
omments: 10. Plant Community Composition and Distribution Relative to Infiltration and Runoff omments: IH,B 11. Compaction Layer omments: 12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: B 14. Litter Amount omments: 15. Annual Praduction amments: 16. Invasive Plants	Comment	s:					
10. Plant Community Composition and Distribution Relative to Infiltration and Runoff omments: H,B 11. Compaction Layer omments: 12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: B 14. Litter Amount omments: 15. Annual Praduction amments: 16. Invasive Plants	S,H,B	9. Soil Surface Loss or Degradation					
Distribution Relative to Infiltration and Runoff omments: H,B 11. Compaction Layer omments: 12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: B 14. Litter Amount omments: 15. Annual Praduction amments: 16. Invasive Plants	Comment	ts:					,
H,B 11. Compaction Layer omments: 12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: B 14. Litter Amount omments: 15. Annual Praduction amments: 16. Invasive Plants	Н	10. Plant Community Composition and Distribution Relative to Infiltration and Runoff					
12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: ,B 14. Litter Amount omments: 15. Annual Praduction amments: 16. Invasive Plants	Comment	is:					
12. Functional/Structural Groups omments: 13. Plant Mortality/Decadence omments: B 14. Litter Amount omments: 15. Annual Praduction amments: 16. Invasive Plants	S,H,B	11. Compaction Layer					
omments: Annual Fortis present throughout the site, (ass grass at process throughout throughout the site, (ass grass at process throughout throughout the site, (ass grass at process throughout	Comment	ds:					Demonstration to the Section
13. Plant Mortality/Decadence omments: B 14. Litter Amount omments: 15. Annual Praduction amments: 16. Invasive Plants	В	12. Functional/Structural Groups				X	
omments: ,B 14, Litter Amount omments: 15. Annual Praduction amments: 16. Invasive Plants	Comment	7711-01 (6)	+ thes	He, 65	5 9/055	Et more	Shribs
,B 14. Litter Amount omments: 15. Annual Praduction omments: 16. Invasive Plants	В	13. Plant Mortality/Decadence					
omments: 15. Annual Praduction amments: 16. Invasive Plants	Commen	ts:		107		as a	institutional services
15. Annual Production amments: 16. Invasive Plants	Н,В	14. Litter Amount					存在的
omments: 16. Invasive Plants	Commen		Today substance pater			徐	William Street
16. Invasive Plants	В	15. Annual Praduction					
The state of the s	Commen	ts:			(mreixare dans min control	70)	The second secon
	В	16. Invasive Plants		X			
omments: Halogeton Common - site religion to this is dominated by helogetime tother annu	Commen	ts: Halogeton Common - 3,148 almost	to this is	dominal	ell by hela	adm tot	her annue
	В						
omments: Military Canada	Commen	ts: police and					

king conto

Part 3. Summary

A. Indicator Summary

Departure from Ecological Site Description/ Ecological Reference Area(s)

	Rangeland Health Attributes	Extrema	Moderate to Extreme	Moderate	Slight to Moderate	None ic Slight	Σ
S	Soil/Site Stability (Indicators 1-6, 8, 9 &11)				2		9
Н	Hydrologic Function (Indicators 1-5, 7-11 & 14)				2		11
В	Biotic Integrity (Indicators 8-9 & 11-17)				1		9

B. Attribute Summary - Check the category that best fits the "prepanderance of evidence" for each of the three attributes relative to the distribution of indicator ratings in the preceding Indicator Summary table.

Attribute	Moderate Moderate Slight to Extreme Moderate Moderate	
Soil/Site Stability Rationale:		
Hydrologic Function Rationale:		A STATE
Biotic Integrity Rationale:		

Attribute Rating- Check one in each row

Soil/Site Stability	Not Stable—	At Risk——	Stable-
Biotic Integrity	Not Intact — □	At Risk —	Intact ————————
Watershed Function	Non-Functioning-	At Risk ——	Functioning- [2]

Comments on Indicator(s) on other side of this page

A	ppen	die	6
A	ppen	CILLY	U

Biotic is @ visk because halogeton is common Page 2.

throughout site in currently is a minor component.

Through some event or chain of events, this site may have the capability of becoming dominated by annual forbs. There is a site adjacent to this one that is dominated by annual forbs (halogeton, russian thistle, burr butterrup), which causes concern for this site.

Trend 3 +4

Rangeland Health Evaluation Summary Worksheet

		ms require completion, other information is optional) Management Unit West Grassy
Pasture/Watershed	ID#	Major Land Resource Area
Location (description)		N:452487
Legal T ,R ,Sec _	, 1/4, 1/4	or Lat, long or UTM Coord E:320448
Size of Evaluation Area_		Photo(s) Taken Yes X No
Observer(s) Gates, He	eaton, Torres	Date 8/27/02
Ecological Site Desert	flat (Shadson	Date 8/27/02 Soil Map Unit Name Timpre Sout Lower (6)
Rangeland Ecological Site De Surface Texture	scription and/or Soil Survey	Area of Interest Determination Surface Texture
Depth: Very Shallow Shollow (<10") (10"-20") List diagnostic horizons in pro 1 3 2 4)") (20"-40") (>40") file and depth	Depth: Very Shallow Shallow Moderate Deep (<10") (10"-20") (20"-40") (>40") List diagnostic harizons in profile and depth 1
Porent Moterial S Avg Annual Precip	Slope % Elevotion _ Recent Weather (last 2	283 ft Topographic Position Aspect NIA 2 years) Drought Normal Wet ances No Sian of Livestock use
Describe offsite influence	s on area of interest	

Species Dominance Worksheet

Part 1 (Required)

Dominant Species on Site	Noxious Weeds
KOKM	1 None
ATCO	
3	3
4	
nvasive Natives	Invasive Exotics
None	
2	2
3	3
Annual Grasses	Annual Forbs
The most common species are ronked a Annual Grasses 1	Annual Forbs 1 Haloge-bon 2
The most common species are ranked a Annual Grasses 2 3 Perennial Grasses	Annual Forbs 1 Haloge for 2 3 Perennial Forbs
The most common species are ronked a Annual Grasses 1	Annual Forbs 1 Haloge-ton 2 3 Perennial Forbs 1 ————————————————————————————————————
The most common species are ranked a Annual Grasses 2 Perennial Grasses 1 2	Annual Forbs 1 Haloge for 2 3 Perennial Forbs 1
The most common species are ronked a Annual Grasses Perennial Grasses	Annual Forbs 1 Haloge for 2 3 Perennial Forbs 1
The most common species are ranked a Annual Grasses Perennial Grasses Common species are ranked a Perennial Grasses Common species are ranked a Perennial Grasses	Annual Forbs 1 Haloge for 2 3 Perennial Forbs 1
Annual Grasses Perennial Grasses Annual Grasses Annual Grasses ATTA	Perennial Forbs 1 Haloge for bs 2 3 Perennial Forbs 1 2 3 Succulents 1 ———————————————————————————————————
The most common species are ranked a Annual Grasses Perennial Grasses Shrubs and Trees	Annual Forbs 1 Haloge for 2 3 Perennial Forbs 1 2 3 Succulents

Functional/Structural Groups Worksheet

State	UT	Office	020	Ecological Site		Site ID	
Observer	r(s)	rates, t	teaton, T	orres	Date	8/27/02	

Functional/St	ructural Groups		Species List for Functional/Structural Groups
Name	Potential	Actual ²	Plont Names
A. Forb		1	
P. Farb	1/5	0	
Shrub		99	
A. Forb P. Forb Shrub A. Grass P. Grass		0	
P. Grass	10	0	
·			
			•
			1,500
			· · · · · · · · · · · · · · · · · · ·
Biological Crust ³			

Indicate whether each "structural/functional group" is a Dominant (D) (roughly 41-100% composition), a Subdominant (S) (roughly 11-40% composition), a Minor Component (M) (roughly 3-10% composition), or a Trace Component (T) (<3 % composition) based on weight or cover composition in the area of interest (e.g., "Actual²" column) relative to the "Potential¹" column derived from information found in the ecological site description and/or at the ecological reference area.

Biological Crust³ dominance is evaluated solely on cover not composition by weight.

Cover Worksheet

State	UT	Office	020	Ecological Site	
Observe	r(s) Gontes,	Heaton,	Torms Date	8/27/02 Site 1	D

			CO	VER CLASSI	ES (% Can	ору)		
LIFE FORMS	0	-0-1	2-5	6-15	16-30	31-50	51-75	76-100
I - Grass								
Annual				, , , , ,		97		
Native Perennial				, -1				
Exotic Perennial				13.17		7 - 000		
II - Forb								
Annual	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Perennial		THE POT WITH		1- 7.4				
MeShrob 28 11 5 7 11 2				315 014 200	28			
IV - Tree:								
V - Succulent				(10)				
VI - Biological Gruff								
% GROUND COVER ²	0	0-1	2-5	6-15	16-30	31-50	51-75	76-100
- Vascular Plants						7.50		
II - Standing Dead Vegetation				8				
III - Litter (in contact with the soil surface)				10				
IV - Biological Crust							45	
V - Rock/Gravel				M_1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
VI - Bare Ground				9				

¹ Life Forms Cover - Record multiple canopy caver classes; total plant canopy may exceed 100%. Small openings (less than 2" in diameter) are included as cover.

Notes: Include source of cover data (e.g., estimates or measurements)

111 44 14

² Ground Cover - Category I is an estimate of total vascular plant cover; overlapping canopies are counted as only one canopy (record life form with first point of contact). Total voscular plant cover (I) together with the sum of cover in Categories II-VI should total to approximately 100%.

Part 2. Indicator Rating

		Dep	arture from Ecologic	Ecological S al Reference	ite Descript Area(s)	ion/
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	Nono to Sligh
S,H	1. Rills					
Commen	ts:	A The Second Sec		partie balance, the family 18 1874		and the second s
S,H	2. Water Flow Patterns					養養
Commen	ts:	passionario de la companya de constituire de la		E-mose-so-continue		The second second second
S,H	3. Pedestals and/or Terracettes	6100				
Commen	ts:					The same of the sa
S,H	4. Bare Ground				X	
Commen	to: Slightly more due to lack	of vege	etative	cover		*
S,H	5. Gullies					
Commen	ts: None					
S	6. Wind-Scoured, Blowouts, and/or Deposition Areas					
Commen	ts:					
Н	7. Litter Movement			100		
Commen	ts: its not moving					
S,H,B	8. Soil Surface Resistance ta Erosion					114
Commen	15: mainly stabilized by coust in b	nt also	vesetati	ve cover		
S,H,B	9. Soil Surface Loss or Degradation		U			
Commen	ts:					
Н	10. Plant Community Composition and Distribution Relative to Infiltration and Runoff					
Commer	ts:					
S,H,B	11. Compaction Layer					
Commer	its: Lake hyrdpan = 10"					
В	12. Functional/Structural Groups				X	
Commer	its: Completely nissing grass con	porent,	butoussil	1-1 not har	e. Ourral	vegetation
В	13. Plant Mortality/Decadence				X	
Commer	its: Slight shadstale deradence					
Н,В	14. Litter Amount					
Commer	its: Gightly less than expecte	1				A LE TOMO OF THE PARTY OF THE P
В	15. Annual Production					
Commer	its: 250 unfavorable					
В	16. Invasive Plants					
Commer	its:					
В	17. Reproductive Capability of Perennial Plants	S				<u> </u>
Commer						

Part 3. Summary

A. Indicator Summary

Departure from Ecological Site Description/ Ecological Reference Area(s)

	Rangeland Health Attributes	t βx)reme	Moderate to Extreme	Moderate	Slight to Moderate	Note to	Σ
S	Soil/Site Stability (Indicators 1-6, 8, 9 &11)				1		9
Н	Hydrologic Function (Indicators 1-5, 7-11 & 14)				2		11
В	Biotic Integrity (Indicators 8-9 & 11-17)			ik.b	3		9

B. Attribute Summary - Check the category that best fits the "preponderance of evidence" for each of the three attributes relative to the distribution of indicator ratings in the preceding Indicator Summary table.

Attribute	Moderate Extreme to Extreme Moderate Moderate
Soil/Site Stability Rationale:	
Hydrologic Function Rationale:	
Biotic Integrity Rationale:	

Attribute Rating- Check one in each row

	Billinge halling chern	Out an other act.	
Soil/Site Stability	Not Stable—	At Risk	Stable 1
Biotic Integrity	Not Intact —— □	At Risk ——	Intact —
Watershed Function	Non-Functioning-	At Risk ——	Functioning——

Comments on Indicator(s) on other side of this page

Append	lix 6	
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Biotic is intect. Lacking some veg. cover, Missing grass component, but according to trend studies there has been no grass as far as we can tell since 1973 Soils are stable due to biotic crust cover,

11-1 Trud 5+6

Rangeland Health Evaluation Summary Worksheet

		ms require completion, other information is optional)
State UT	Office Ut-020	Management Unit WEST GOSS /
Pasture/Watershed	ID#	Major Land Resource Area
Location (description)		N:14844006
Legal T ,R ,Sec _	, 1/4, 1/4	or Lat, long or UTM Coord E-1079860
Size of Evaluation Area _		Photo(s) Taken Yes X No
Observer(s) Sates, H	eaton Torres	Date 8/23/02
Ecological Site Semi des	Sert Story Locm	Soil Map Unit Name HIKO Deak very Ston
Rangeland Ecological Site Des		Area of Interest Determination
Surface Texture		Surface Texture
Depth: Very Shallow Shallov (<10") (10"-20	Moderate Deep (**) (20"-40")	Depth: Very Shallow Shallow Moderate Deep (<10") (10"-20") (20"-40") (>40")
List diagnostic horizons in pro	file and depth	List diagnostic horizons in profile and depth
13		13
24		24
Avg Annual Precip Describe wildlife and livesto	Recent Weather (last 2	years) Drought & Normal Wet onces Sheep allo tment, good antelope
VG-DITT-CT		
Describe offsite influence	s on area of interest _Do	inse cheatgrass area adjacent to

Species Dominance Worksheet

(non-noxious) are ranked occording to do	0 - 0 -
Dominant Species on Site	Noxious Weeds
1 ArNo	1
2 Blueburch	
3	3
4	
nvasive Natives	Invasive Exotics
1	
-	
2	
Part 2 (Optional) Dominant Species by	3
Part 2 (Optional) Dominant Species by The most common species are ranked acc Annual Grasses 1 BAE	Life Form cording to dominance using cover or weight by life Annual Forbs 1 Burebuffer Cup 2 Phlox
Part 2 (Optional) Dominant Species by The most common species are ranked acc Annual Grasses BATE Perennial Grasses	Annual Forbs 1 Burbuffer Cup 2 Phlox 3 Perennial Forbs
Part 2 (Optional) Dominant Species by The most common species are ranked acc Annual Grasses 1 BATE 2 Perennial Grasses 1 ORHY	Annual Forbs 1 Burbuffer Cup 2 Phlox 3 Perennial Forbs
Part 2 (Optional) Dominant Species by The most common species are ranked acc Annual Grasses 1 BAE 2 Perennial Grasses 1 ORMY	Annual Forbs 1 Burbuffer Cup 2 Phlox 3 Perennial Forbs 1 2 Phlox 3
Part 2 (Optional) Dominant Species by The most common species are ranked acc Annual Grasses 1 BATE 2 Perennial Grasses 1 OPHY	Annual Forbs 1 Burbuffer Cup 2 Phlox 3 Perennial Forbs 1 2 Perennial Forbs 1 2
Part 2 (Optional) Dominant Species by The most common species are ranked acc Annual Grasses 1 BATE 2 3 Perennial Grasses 1 ORHY 2 ROSL 3 RIMEBUNCH	Annual Forbs 1 Burbuffer Cup 2 Phlox 3 Perennial Forbs 1 2 Phlox 3
Part 2 (Optional) Dominant Species by The most common species are ranked acc Annual Grasses 1 BATE 2 3 Perennial Grasses 1 ORHY 2 ROSL 3 RIMEBUNCH	Annual Forbs 1 Burbuffer Cup 2 Phlox 3 Perennial Forbs 1 2 3
Part 2 (Optional) Dominant Species by The most common species are ranked acc Annual Grasses 1 BRE 2 3 Perennial Grasses 1 ORHY 2 ROSL 3 RIMEBUNCH Shrubs and Trees	Life Form ording to dominance using cover or weight by life Annual Forbs 1 Burbuffer Cup 2 Phlox 3 Perennial Forbs 1 2 3 Succulents

Functional/Structural Groups Worksheet

			Ecological Site		_ Site ID
Observer(s) Gates,	Heaton,	Torres	Date 8/23/0	2

Functional/Struct	ural Groups		Species List for Functional/Structural Groups
Nome	Potentia	Actual ²	Plant Names
Perenial Grass	35	26	
Perenial Forb	25		
Annual Forb -			
Shrubs	60	70	
Annual Glass		3	
			4. 2074
Biological Crust ³			

Indicate whether each "structural/functional group" is a Dominant (D) (roughly 41-100% composition), a Subdominant (S) (roughly 11-40% composition), a Minor Component (M) (roughly 3-10% composition), or a Trace Component (T) (<3 % composition) based on weight or cover composition in the area of interest (e.g., "Actual²" column) relative to the "Potential¹" column derived from information found in the ecological site description and/or at the ecological reference area.

Biological Crust³ dominance is evaluated solely on cover not composition by weight.

Cover Worksheet

State	NT	Office _	020	Ecological Site	
Observer(s) Gates,	Heaton,	Torres	Date 8/23/02 Site ID	4-1

			CO	VER CLASSI	ES (% Can	ору)		
LIFE FORMS	0	0-1	2-5	6-15	16-30	31-50	51-75	76-100
1 - Grass								
Annual			2					
Native Perennial					24			
Exotic Perennial	0			an See gr				
II - Forb								
Annual		90.0		1 20 + 1 				
Perennial				1 8		1230000		
III = Shrub				77 = <u>10</u> <u>12</u> 900		47		
IV - Tree								
V Succulent						10000000		
VI - Biological Grust								
% GROUND COVER ²	0	0.1	2-5	6-15	16-30	31-50	51-75	76-10
I - Vascular Plants				-		1.75	72	
II - Standing Dead Vegetation			2					
III - Litter (in contact with the soil surface)				b		4.4		
IV - Biological Crust			5					
V - Rock/Gravel				- 13 1				
VI - Bare Ground			2			1000		

¹ Life Forms Cover - Record multiple canopy cover classes; total plant canopy may exceed 100%. Small openings (less than 2" in diameter) are included as cover.

Notes: Include source of cover data (e.g., estimates or measurements)

² Ground Cover - Category I is an estimate of total vascular plant cover; overlapping canopies are counted as only one canopy (record life form with first point of contact). Total vascular plant cover (I) together with the sum of cover in Categories II-VI should total to approximately 100%.

Part 2. Indicator Rating

		'Depo	erture from Ecologic	Ecological S al Reference	ite Descript Area(s)	ion/
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	Nenate Sligh
S,H	1. Rills					
Comment	ts:					
S,H	2. Water Flow Patterns				X	- E2
Comment	is: Short, Stable, lots of arou	101, Ste	10 3/01	Ol.		San Haracas and San
S,H	3. Pedestals and/or Terracettes		1		X	
Comment	1 22 1 21 4	14 Garage of Agency Control Hard		The second of th		I and the second
S,H	4. Bare Graund					
Commen	ts: Mostly Rocks	Constitution and Constitution of		The state of the s		-
S,H	5. Gullies				X	
Commen	ts: Vear Jorded	Today were ween an integral and an integral		Coloration of Manager House Lot		Page of the second seco
S	6. Wind-Scoured, Blowouts, and/or Deposition Areas					
Commen	ts:		-			
Н	7. Litter Movement					16
Commen	ts:			The beginning		
S,H,B	8. Soil Surface Resistance to Erosion					
Commen	15: Rock & vegetation, gravelly	Soil				
S,H,B	9. Soil Surface Loss or Degradation					
Commen	ts:	11,000				
Н	10. Plant Community Composition and Distribution Relative to Infiltration and Runoff					1) 1075 1074 1074
Commen	ts: (oralelly See)	Property of the Control of the Contr	•	Tancasan and an analysis		
S,H,B	11. Compaction Layer					
Commen	ts:	The state of the s				
В	12. Functional/Structural Groups				X	
Commen	ts: Less grass & Garbs more sh					1.
В	13. Plant Mortality/Decodence					
Commen	ts:					
Н,В	14. Litter Amount					
Commen	ts:					
В	15. Annual Production					
Commen	ts: 300 unfavorable					
В	16. Invasive Plants					
Commen		1115 1-1	5 Mile	E X-17.	1 3011	red th
В	17. Reproductive Capability of Perennial Plants					10.2
Commen			ara.	The superstant and the superstan	1014	manes resembled

POIN

Part 3. Summary

A. Indicator Summary

Departure from Ecological Site Description/ Ecological Reference Area(s)

	Rangeland Health Attributes	-Extreme	Moderate to Extreme	Moderate	Slight to Moderate	Σ
S	Soil/Site Stability (Indicators 1-6, 8, 9 & 11)				3	9
Н	Hydrologic Function (Indicators 1-5, 7-11 & 14)				3	11
В	Biotic Integrity (Indicators 8-9 & 11-17)				1	9

B. Attribute Summary - Check the category that best fits the "prepanderance of evidence" for each of the three attributes relative to the distribution of indicator ratings in the preceding Indicator Summary table.

Attribute	Moderate Slight to Average Moderate Moderate
Soil/Site Stability Rationale:	
Hydrologic Function Rationale:	
Biotic Integrity Rationale:	

Attribute Rating- Check one in each row

~	Willings agained cheen	CARC BE SECTION	
Soil/Site Stability	Not Stable——	At Risk	Stable-
Biotic Integrity	Not Intact —— □	At Risk ——	Intact —
Watershed Function	Non-Functioning-	At Risk	Functioning-
A SICISICI PURCH PURCHER		And the property and the last of the last	

Comments on Indicator(s) on other side of this page

Appendix 6

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Page 2

Cheatgrass invading thave a little less perenial grasses ! Forbs than expected there a little less perenial grasses ! Forbs than expected very gravelly soil in tact & where not gravelly have vegetation

Site #1

Rangeland Health Evaluation Summary Worksheet

		ns require completion, other information is optional)
StateOffice_	Ut-020	Management Unit West gruss/
		Major Land Resource Area
Location (description)		N: 4528229 "
Legal T ,R ,Sec 23 ,	1/4, 1/4	or Lat, Long or UTM Coord = 32.73.78
Size of Evaluation Area		Photo(s) Taken Yes No
Observer(s) Cates, Heaten,	Torres	Date 8/23/01
Ecological Site Bemi desert Some wyoming big so	andy loam	Soil Map Unit Name Skampak Sitt Larv
Rongeland Ecological Site Description an		Area of Interest Determination
Surface Texture		Surface Texture
Depth: Very Shallow Shallow Mode		Depth: Very Shallow Shallow Moderate Deep
(<10") (10"-20") (20"-4		(<10") (10"-20") (20"-40") (>40")
List diagnostic horizons in profile and dep		List diagnostic horizons in profile and depth
24		1 3 4
Parent Material Slope	% Elevation 501	8 ft Topogrophic Position Aspect _SW
Avg Annual Precip Recent	Weather (last 2	years) Drought X Normal Wet
Describe wildlife and livestock use an		
Describe offsite influences on area	of interest	
PARTIES SITURE HITTERIORS OF MICO		

Species Dominance Worksheet

(non-noxious) are ranked according to domin	nonce using cover or weight .
Dominant Species on Site	Noxious Weeds
1. Atco	1
2 Sihy	
3 Kria	
4	
Invasive Natives	Invasive Exotics
	5 -1
2	
	e Form ing to dominance using cover 🗌 or weight 🗌 by life f
Part 2 (Optional) Dominant Species by Life The most common species are ronked accordi Annual Grasses 1 BRTE	Annual Forbs 1 Halogeton Buributter Cuo 2 Sakola iberica
Part 2 (Optional) Dominant Species by Life The most common species are ronked according Annual Grasses BRIF Perennial Grasses	Annual Forbs 1 Halogeton Bury butter Curo 2 Sakola iberica 3 Lepidium perfolintum Perennial Forbs
Part 2 (Optional) Dominant Species by Life The most common species are ronked according Annual Grasses BRT Perennial Grasses	Annual Forbs 1 Habaton Burbutter Ciro 2 Salala iberica 3 Lepidium perfolintum Perennial Forbs 1 Phoy
Part 2 (Optional) Dominant Species by Life The most common species are ronked according Annual Grasses BRT R Perennial Grasses SIHY ORRY	Annual Forbs 1 Halogeton Burrbutter Cipo 2 Sakola iberica 3 Lepidium perfolintum Perennial Forbs 1 Phoy
Part 2 (Optional) Dominant Species by Life The most common species are ronked according Annual Grasses BRT F Perennial Grasses	Annual Forbs 1 Halogeton Burrbutter Cipo 2 Sakola iberica 3 Lepidium perfolintum Perennial Forbs 1 Phoy
Part 2 (Optional) Dominant Species by Life The most common species are ronked according Annual Grasses 1 BRTE 2 Perennial Grasses 1 SIHY 2 POSC Shrubs and Trees	Annual Forbs 1 Halogeton Burrbutter Cipo 2 Sakola iberica 3 Lepidium perfolintum Perennial Forbs 1 Phoy
Part 2 (Optional) Dominant Species by Life The most common species are ronked according Annual Grasses BRTE Perennial Grasses SHY OPHY ARTR KRLA THADUMIA	Annual Forbs 1 Habaton Buributter Cur 2 Salala iberica 3 Lepidium perfolintum Perennial Forbs 1 Phox 2 3
Part 2 (Optional) Dominant Species by Life The most common species are ronked according Annual Grasses 1 BRTF 2 3 Perennial Grasses 1 SIHY 2 ROSE Shrubs and Trees	Annual Forbs 1 Halogeton Buributter Circ 2 Salcola iberica 3 Lepidium perfolintum Perennial Forbs 1 Phlox 2 3 Succulents

Functional/Structural Groups Worksheet

State _	NT	Office .	020	Ecological Site		Site ID	
Observ	er(s)_	Gates,	Heaton	Toures	Date 5/23/07		

Functional/St	tructural Groups		Species List for Functional/Structural Groups
Name	Polenkal	Aclual ²	Plant Names
A. Forb	710	8	
P. Farb	3	+	
A, Forb P, Forb Shrub	35	62	
	_	5	
A. Grass P. Grass Tree	55	25	
Tree		T	
· · · · · · · · · · · · · · · · · · ·			
Biological Crust ³			

Indicate whether each "structural/functional group" is a Dominant (D) (roughly 41-100% composition), a Subdominant (S) (roughly 11-40% composition), a Minor Component (M) (roughly 3-10% composition), or a Trace Component (T) (<3 % composition) based on weight or cover composition in the area of interest (e.g., "Actual²" column) relative to the "Potential¹" column derived from information found in the ecological site description and/or at the ecological reference area.

Biological Crust³ dominance is evaluated solely on cover not composition by weight.

Cover Worksheet

State	UT_	Office _	020	Ecological Site	
Observer	(s) Gates	uc. ton	3076	Date 8/23/02 Site ID	

	COVER CLASSES (% Canopy)							
LIFE FORMS ¹	0	0-1	2-5	6-15	16-30	31-50	51-75	76-100
I - Grass								
Annual				6				
Native Perennial					22			
Exotic Perennial	0			on there				
lle Forb								
Annual	nungijiinungijajangs		<u> </u>	12				
Perennial		14						
III =Shrub					29	, , , , , , , , , , , ,		
IV - Tree ()				. See the second				
ViziSucculent				120.00				
VI - Biological Crust						1131		
% GROUND COVER ²	0	0-1	2-5	6-15	16-30	31-50	51-75	76-100
I - Vascular Plants				- 15			69	
II - Standing Dead Vegetation			5			7.4%		
III - Litter (in contact with the soil surface)			***	7		1		
IV - Biological Crust				12				
V - Rock/Gravel								
VI - Bare Ground				10				

¹ Life Forms Cover - Record multiple canopy cover classes; total plant canopy may exceed 100%. Small openings (less than 2" in diameter) are included as cover.

Notes: Include source of cover data (e.g., estimates or measurements)

² Ground Cover - Category I is an estimate of total vascular plant cover; overlapping canopies are counted as only one canopy (record life form with first point of contact). Total vascular plant cover (I) together with the sum of cover in Categories II-VI should total to approximately 100%.

Part 2. Indicator Rating

Attribute S,H		In the said Mean Propagation III				
5.H	Indicators	-bwremer	Moderate to Extreme	o Modernia	Slight to Moderate	Mon W Militi
-1.	1. Rills					
Comments):			E 1 transferon Andrews (Additional Places State US Co.)		Participation (Chairman Chairman
S,H	2. Water Flow Patterns				X	
Camments	31			Dampas, mental and control and		PRESIDENCE CONTRACTOR CONTRACTOR
S,H	3. Pedestals and/or Terracettes	1.00			X	
Comments	7 7 7 7					100000000000000000000000000000000000000
S,H	4. Bare Ground					
Comments	5:	[Line-Special manufactures from		Transport esta-passassassassassassassassassassassassass		- Henrico de Secondo
S,H	5. Gullies				X	
Comments	s: Stable	The state of the s		- A THE PARTY OF T		150055000000000000000000000000000000000
S	6. Wind-Scoured, Blowouts, and/or Deposition Areas					
Comments		The state of the s		3.00		
Н	7. Litter Movement					
Comments	5:	was not been a series of the s	1	and the state of t		
S,H,B	8. Soil Surface Resistance to Erasion					
Comments	s: Lots of Crust & good was	COVAF		The state of the s	18.	
S,H,B	9. Soil Surface Loss or Degradation					
Comments	ls :	Manage Section For the William			11	I I I I I I I I I I I I I I I I I I I
Н	10. Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments	5:			and the same of th		A transfer of construction of the
S,H,B	11. Compaction Layer					表表" "。
Comments	5:			Section and Control of the Control o		57-1101-51-51-1101
В	12. Functional/Structural Groups		-		l V	
Comments	s: MISSIMA SOME PERMIA AFASSES	SPECIES			10	
В	13. Plant Mortality/Decadence					
Comment	s: Shadstall & bumuhavasses					
Н,В	14. Litter Amount					
Comments	s: Allthe kss					
В	15. Annual Production					
Comment	5:					
В	16. Invasive Plants				X	
Comments	s: Espicially on Disturbed Sight	3				
В	17. Reproductive Capability of Perennial Plants					

Part 3. Summary

A. Indicator Summary

Deporture from Ecological Site Description/ Ecological Reference Area(s)

	Rangeland Health Attributes	zi je Remeritrētis	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight	Σ
S	Soil/Site Stability (Indicators 1-6, 8, 9 & 11)				3		9
Н	Hydrologic Function (Indicators 1-5, 7-11 & 14)				5		11
В	Biotic Integrity (Indicators 8-9 & 11-17)				3		9

B. Attribute Summary - Check the category that best fits the "prepanderance of evidence" for each of the three attributes relative to the distribution of indicator ratings in the preceding Indicator Summary table.

Attribute	Moderate Slight to Moderate Slight
Soil/Site Stability Rationale:	
Hydrologic Function Rotionale:	
Biotic Integrity Rationale:	

Attribute Rating- Check one in each row

	Destinated negatives	7 4 4	
Soil/Site Stability	Not Stable	At Risk——	Stable-
Biotic Integrity	Not Intact —— □	At Risk —	Intact —
Watershed Function	Non-Functioning-	At Risk	Functioning——

Comments on Indicator(s) on other side of this page

Appendix 6

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Page 2

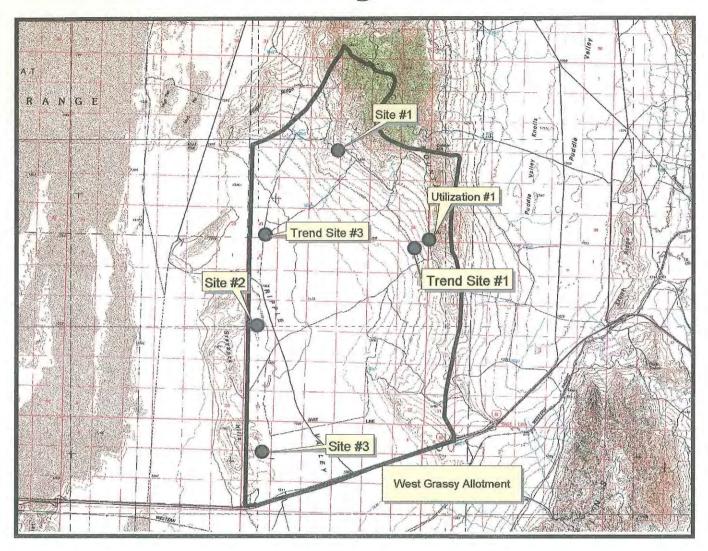
Less Perennial grass & more shrubs than expected

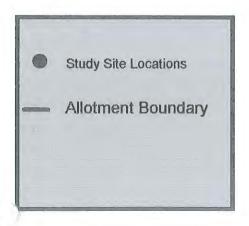
Grass die off of shadscale die off

In transition areas but are of transect, maybe alandon

trend site?

West Grassy Allotment





Bureau of Land Management Salt Lake Field Office 2370 South 2300 West Salt Lake City, UT 84119



This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause misalignment of data layers.

Figure 1. West Grassy Allotment Rangeland Health Assessment Site Locations.